

UNITED STATES OF AMERICA
POSTAL REGULATORY COMMISSION
WASHINGTON, DC 20268-0001

Before Commissioners:

Ruth Y. Goldway, Chairman;
Nanci E. Langley, Vice Chairman;
Mark Acton;
Tony Hammond; and
Robert G. Taub

Petition of the United States Postal Service
for the Initiation of a Proceeding to Consider Proposed
Changes in Analytical Principles (Proposals Six and Seven)

Docket No. RM2012-7

ORDER ON ANALYTICAL PRINCIPLES USED IN
PERIODIC REPORTING
(PROPOSALS SIX AND SEVEN)

(Issued October 24, 2012)

I. INTRODUCTION

In Order No. 203, the Commission adopted periodic reporting rules pursuant to 39 U.S.C. § 3652.¹ Those rules require the Postal Service to obtain advanced approval, in a notice and comment proceeding under 5 U.S.C. § 553, whenever it seeks to change the analytical principles that it applies in preparing its periodic reports to the Commission required by section 3652.

¹ Docket No. RM2008-4, Notice of Final Rule Prescribing Form and Content of Periodic Reports, April 16, 2009 (Order No. 203).

On September 4, 2012, the Postal Service filed a petition pursuant to 39 CFR 3050.11 requesting that the Commission initiate an informal rulemaking proceeding to consider two proposals to change the analytical methods approved for use in periodic reporting.² On September 5, 2012, the Commission issued Order No. 1459 initiating this rulemaking proceeding; providing for the submission of comments and reply comments; and appointing a Public Representative.³ The Postal Service also responded to Chairman's Information Request No.1, September 21, 2012 (CHIR No. 1).⁴

Proposal Six would make the Foreign Postal Settlement (FPS) system the sole source for the reporting of inbound international revenue, pieces, and weight in the International Cost and Revenue Analysis (ICRA) report.

Proposal Seven would replace the current, study-based parcel densities in the Transportation Cost System (TRACS) Highway Subsystem with parcel dimensional data now regularly captured in TRACS-Highway tests.

The Commission approves Proposals Six and Seven. Each proposal is discussed below.

² Petition of the United States Postal Service for the Initiation of a Proceeding to Consider Proposed Changes in Analytical Principles (Proposals Six and Seven), September 4, 2012 (Petition).

³ Order No. 1459, Notice of Proposed Rulemaking on Analytical Principles Used in Periodic Reporting (Proposals Six and Seven), September 5, 2012.

⁴ Responses of the United States Postal Service to Questions 1-10 of Chairman's Information Request No. 1, September 21, 2012 (CHIR Response).

II. PROPOSAL SIX: USE OF THE FOREIGN POSTAL SETTLEMENT SYSTEM IN THE INTERNATIONAL COST AND REVENUE ANALYSIS

A. Postal Service Proposal

Beginning with FY 2009, the Postal Service has presented financial results for international mail in two versions of the ICRA.⁵ Under the “Imputed” version of the ICRA, inbound revenue, pieces, and weights are calculated from weight data provided by the Postal Service’s St. Louis Accounting Service Center (ASC) and estimates of items per kilogram (IPK) from the System for International Revenue and Volume Inbound (SIRVI) sampling system. Petition at 4. The weight data and IPK estimates serve as inputs to calculations in the ICRA model.⁶ The ICRA Imputed version is a legacy of the regulation of international mail pursuant to the Postal Reorganization Act. Under the “Booked” version, introduced in FY 2009, the ICRA model calculations are adjusted to provide disaggregated financial results by product consistent with the Postal Service’s audited financial statements.⁷

In Proposal Six, the Postal Service proposes to use the FPS system as the “sole source” for the ICRA’s reporting of inbound international revenue, pieces and weights. *Id.* at 2. The FPS system compiles volume and weight data on inbound mail from actual transaction billing documents and electronic messaging provided by foreign postal

⁵ See Docket No. RM2009-10, Order No. 339, Analytical Principles Used in Periodic Reporting (Proposals Three-Nineteen), November 13, 2009, Proposal Eleven.

⁶ Weight data for each category of inbound mail entered with the Postal Service are reported to the ASC by foreign postal operators. Those weight data are combined with the IPK for each category and terminal dues rates to calculate inbound revenue and pieces by inbound category. Technically, the weight in kilograms is divided by the IPK to derive an estimate of the number of pieces for each category. The resulting estimate of pieces is then multiplied by the appropriate per item and per kilogram rate for “target” system countries, or a per kilogram rate for “transition” system countries, to derive revenue by inbound category.

⁷ See Docket No. RM2009-10, Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider Proposed Changes in Analytic Principles (Proposals Three-Nineteen), July 28, 2012, Proposal Eleven. The Imputed version of the ICRA is reported in the Excel file “Reports.xls,” and the ICRA Booked version in the Excel file “Reports (Booked).xls.” Both versions are filed under seal (non-public) with the Postal Service’s Annual Compliance Report. For FY 2011, see Docket No. ACR2011, Library Reference USPS-FY11-NP2, December 29, 2011.

administrations. Using FPS data will end reliance on weight data and IPK estimates to calculate inbound volumes and will eliminate the need to make a separate calculation of inbound revenue in the Booked version of the ICRA. *Id.* at 4.

The Postal Service states that use of FPS data for reporting inbound international revenue, pieces, and weights in the ICRA “would improve the consistency among the ICRA, RPW, and financial statements.” *Id.* In this regard, the Postal Service observes that the Revenue, Pieces and Weight (RPW) report already relies on FPS data to estimate inbound revenue, pieces, and weights. *Id.* at 3. However, the Postal Service acknowledges that Proposal Six “does not entirely eliminate the need for both the Booked and Imputed versions [of the ICRA] because the proposal does not address Outbound International calculations.” *Id.* at 4.

Accompanying the Petition is a revised version of Library Reference USPS-FY11-NP2 that incorporates Proposal Six. This Library Reference is non-public and is designated USPS-LR-RM2012-7/NP1. *Id.* at 2. The Postal Service states that USPS-LR-RM2012-7/NP1 displays the impacts of its proposed methodology on both the FY 2011 Imputed and Booked versions of the ICRA as filed in Docket No. ACR2011.

In response to CHIR No. 1, the Postal Service filed a corrected version of Library Reference USPS-LR-RM2012-7/NP1. This version was filed as Library Reference USPS-LR-RM2012-7/NP2. CHIR Response, question 4. As a result, the Postal Service reports that pieces and weights increase 2.10 percent and 2.89 percent, respectively, over the amounts reported in the Imputed and Booked versions of the ICRA as originally filed in Docket No. ACR2011. Petition at 4-5. In a comparison of the Imputed version of the ICRA versus the proposed methodology, revenues decrease 0.32 percent and volume variable costs decrease 1.23 percent due to changes in the distribution of volumes and weights by country under FPS. *Id.* at 5. In a comparison of the ICRA Booked version versus the proposed methodology, revenues decrease 0.87 percent and volume variable costs are essentially unchanged. *Id.*

B. Participant Comments

Comments were filed by the Public Representative.⁸ No other party filed comments. The Public Representative recommends that the Commission approve Proposal Six. The Public Representative maintains that it is reasonable for the ICRA to rely on FPS data, given that the RPW is already using such data as its source for inbound revenue, pieces, and weights. PR Comments at 2.

Nevertheless, the Public Representative expresses concern that Proposal Six will not be fully implemented for the FY 2012 ACR. Inbound revenues will differ for the Imputed and Booked versions of the FY 2012 ICRA, even though the difference between imputed and booked revenues is less than two percent. *Id.* For future years, the Public Representative recommends that the Commission ensure that the Postal Service rely solely on FPS data in order to remove the inconsistency, albeit small, in the reporting of inbound revenue. *Id.* at 3. In addition, the Public Representative encourages the Postal Service to “investigate a way to improve the reporting of Outbound International Mail so that...only one version of the ICRA would be necessary.” *Id.*

C. Commission Analysis

The Commission approves Proposal Six. The Commission agrees with the Postal Service that this proposal would improve consistency among the Imputed and Booked versions of the ICRA, the RPW, and the Postal Service’s financial statements. In this regard, inbound pieces and weights reported in the Imputed and Booked versions of the FY 2012 ICRA will be the same as reported in the RPW. CHIR Response, question 1. In addition, inbound revenues for FY 2012 reported in the ICRA Booked version will be the same as reported in the RPW. *Id.* Given these results, the Commission concludes that the methodological changes of Proposal Six make useful

⁸ Public Representative Comments in Response to Order No. 1459, October 5, 2012 (PR Comments).

improvements in the reporting of inbound revenue, pieces, and weights compared to FY 2011.⁹

As the Postal Service observes, however, “convergence has not been entirely achieved.” CHIR Response, question 1. For FY 2012, inbound revenue presented in the ICRA Imputed version will not be the same as inbound revenue presented in the ICRA Booked version, or in the RPW. Moreover, there will be a continuing need for both the Imputed and Booked versions of the ICRA because Proposal Six does not address differences in Imputed and Booked outbound international cost calculations. Some Postal Service outbound costs are “settlement” payments, *i.e.*, terminal dues and other Postal Service payments, to foreign postal administrations for the delivery of U.S. outbound letterpost and parcels in foreign countries.¹⁰

With respect to differences in outbound international costs between the Imputed and Booked versions of the ICRA, the Postal Service states that it “intends to pursue eliminating those differences in the future.” *Id.* question 2. However, the Postal Service adds that eliminating such differences is a complicated process “because the ICRA uses data from a variety of departments or functions, such as Accounting, FPS and RPW, and those functions must devote resources to investigating the issue, devising a plan and implementing a coordinated solution.” *Id.* That effort “will not be completed in time for the FY 2012 ACR.” *Id.*

The Commission considers Postal Service efforts to eliminate differences in reported inbound revenue between the Imputed and Booked versions of the ICRA to be important in improving transparency. Similarly, eliminating differences in reported outbound costs between the Imputed and Booked versions of the ICRA would further

⁹ To see the differences in inbound revenue, pieces, and weights between the various reports in FY 2011, *compare* Docket No. ACR2011, FY 2011 RPW report presented in the (non-public) Excel file “CHIR1.Q38.Nonpublic.xls,” Library Reference USPS-FY11-NP33, *with* the Booked and Imputed versions of the ICRA in the (non-public) Excel files “Reports (Booked).xls” and “Reports.xls,” filed in Library Reference USPS-FY11-NP2.

¹⁰ See Docket No. ACR2011, Library Reference USPS-FY11-NP2, Excel File “Reports (Booked).xls” worksheet tab “B Pages (md).”

improve consistency. The Commission therefore encourages the Postal Service to expeditiously make additional changes that will permit the reporting of financial results for international mail in one version of the ICRA that is consistent with the RPW and the Postal Service's financial statements.

III. PROPOSAL SEVEN: USE OF ACTUAL CUBIC-FOOT MEASUREMENTS OF PARCELS IN THE TRANSPORTATION COST SYSTEM HIGHWAY SUBSYSTEM

A. Postal Service Proposal

The Postal Service proposes to replace the parcel densities in the TRACS-Highway subsystem. Petition at 6. These densities are used to develop distribution keys for assigning volume-variable costs to postal products in Cost Segment 8 (Vehicle Service Driver (VSD) costs) and in Cost Segment 14 (purchased transportation costs). The Postal Service states that currently, separate study-based estimates of mailpiece densities by mail category and shape for letters, flats, and parcels are used to convert sampled weight information to cubic feet. Under the proposed methodology, the estimated cubic measurements of sampled parcels would be replaced with actual parcel dimensional measurements regularly captured in TRACS-Highway tests. *Id.*

The Postal Service states that beginning with Quarter 1 of FY 2012, the TRACS-Highway Subsystem began utilizing actual, measured length, width, and height information for parcel-shaped pieces. *Id.* Appendix at 1. As a result, the cubic-foot component of the cubic-foot-miles distribution key for parcels can be determined directly from the product of the three dimensions. These direct measurements obviate the need for density study information and periodic study updates for parcels. The Postal Service believes that this methodology is more reliable since cubic-foot information is continuously updated automatically across sampling periods. *Id.*

For the subset of parcels identified as irregular in shape, the Origin-Destination System and Revenue, Pieces, and Weight factor of 0.785 would be applied.¹¹ No other changes would be required or made to the current TRACS-Highway processing system and methodology, including the development of the miles component of the cubic-foot-mile distribution key. *Id.* at 1-2.

The Postal Service states that there is a small proportion of sampled parcels for which useable dimensional information is unavailable (approximately five percent of sampled parcels). For these parcels a smoothed, composite, four-quarter density ratio would be developed by major mail category to convert sampled weight measures to cubic-foot measures. The Postal Service states that a smoothed, ratio-based density measure helps to adjust for seasonal swings as well as to reduce sampling variation associated with the smaller mail categories. *Id.* at 2.

The Postal Service states that the product group Media and Library Mail is most affected by the proposed methodology change. That product group would see a change in cost per piece of $-\$0.021$, a relative change of -2 percent. Parcel Post would see the next largest change in cost per piece at $-\$0.010$, with a relative change of -0.12 percent. All other product groups would have changes in cost per piece of less than $\$0.010$. Petition at 7.

B. Participant Comments

Comments were filed by the Public Representative. No other parties submitted comments. The Public Representative recommends that the Commission approve Proposal Seven. PR Comments at 4.

¹¹ The derivation and use of the 0.785 factor is described in Docket No. R2006-1, Direct Testimony of Thomas M. Scherer on Behalf of the United States Postal Service, USPS-T-33, May 3, 2006, at 21-26. This factor is $\pi/4$. Cubic volume = length * (π * major axis * minor axis)/4 = length * (π * width * height)/4 = ($\pi/4$) * length * width * height.

C. Commission Analysis

The Commission approves this proposal. The Postal Service proposes to use dimensional length, width, and height information collected through the TRACS-Highway and TRACS-VSD subsystems to estimate parcel volume in cubic feet. The parcel volume measures are ultimately used in developing distribution keys for assigning volume-variable costs of purchased transportation, and Vehicle Service Drivers to mail classes and subclasses. The proposed approach replaces the study-based density factors by mail category and shape that are currently used to convert sampled parcel weights to cubic feet in the TRACS-Highway and TRACS-VSD subsystems.¹² The Commission agrees with the Postal Service that the parcel cubic-foot measures obtained under the proposed methodology reflect significant improvements over the current indirect study-based approach since the proposed approach utilizes actual length, width, and height information.

To implement this proposal, the Postal Service has made changes to the TRACS-Highway and TRACS-VSD subsystems and has begun collecting the required data including length, width, and height from sampled parcels, beginning in the first quarter of FY 2012. Petition, Appendix at 1. Additionally, the Postal Service modified the TRACS-Highway and TRACS-VSD subsystems' SAS expansion program that is used to expand and estimate distribution keys. The Postal Service explains that two SAS macros have been added to (1) develop composite densities by mail category for parcels requiring density-based cubic-foot measures; and (2) assign cubic-foot measures to parcels using either captured dimensional information or composite density default values. CHIR Response, question 6.

In its proposal, the Postal Service explains that additional parcel dimensional characteristics, including shape type (regular or irregular) are also recorded during data collection. Petition, Appendix at 1. Regular-shaped parcels are those pieces with

¹² The study-based density factors are periodically updated by the Postal Service. They were last updated in Docket No. R2005-1, USPS-LR-K-33.

square or rectangular shapes. Irregular-shaped parcels are pieces that have rolled, triangular, cylindrical, or other odd shapes. CHIR Response, question 8.

The Postal Service states that irregular-shaped parcels account for about 22 percent of the total volume of all parcels. *Id.* The Postal Service collects length, width, and height information for both regular-shaped and irregular-shaped parcels in the TRACS-Highway and TRACS-VSD subsystems. According to the Postal Service, length is the longest dimension, and height and width are measured at their maximum cross-sections for irregular-shaped parcels. *Id.* For regular-shaped parcels, the cubic feet for each parcel piece will be calculated by multiplying the three dimensions, *i.e.*, length, width, and height.¹³ For irregular-shaped parcels, first cubic-foot values of each sampled parcel are calculated by multiplying the three dimensions, and then the resulting cubic-foot values are adjusted downward by applying the ODIS-RPW-based factor of 0.785. Petition, Appendix at 2.

The Postal Service notes that useable dimensional information for a small proportion of sampled parcels (approximately five percent of sampled parcels) may not be captured in the TRACS-Highway and TRACS-VSD subsystems. *Id.* The reason for unusable dimensional information is that some data fields for mail items and handling units may not be complete due to data edits and circumstances where a data collector may not be able to capture the data. CHIR Response, question 9. For those sampled parcels with unusable dimensional information, the Postal Service proposes to develop smoothed composite four-quarter density ratios and to apply these density ratios to convert sampled parcel weights to cubic feet. Petition, Appendix at 2. The smoothed four-quarter density ratios are derived by dividing the average pound per parcel by the average cubic feet per parcel using data from those sampled parcels for which useable dimensional information has been captured during the current and prior three quarters. CHIR Response, questions 6 and 9. Separate density ratios are developed for each quarter based on the current and prior three quarters data. The Postal Service claims

¹³ To convert the volume measures from cubic inches to cubic feet, the cubic inch values are divided by 1,728.

that the use of a moving average of multiple quarters of data helps reduce major fluctuations across sampling periods. *Id.* at 15.

The estimated composite density ratios are significantly different from the study-based density factors that are currently used in the TRACS-Highway and TRACS-VSD subsystems.¹⁴ The Postal Service maintains that the cubic-foot measures obtained under the proposed methodology are more reliable than the existing engineering study-based density measures because the proposed approach utilizes actual dimensional information captured during the TRACS live mail testing. *Id.* question 10.

In response to CHIR No. 1, the Postal Service provides two tables showing the impacts of the proposal on distribution of volume-variable costs to products using FY 2011 data. For VSD costs (Cost Segment 8), cost per piece for single-piece Parcel Post is most affected by the proposal, followed by Media and Library Mail. The cost of single-piece Parcel Post fell by 0.01 cents per piece, and the cost of Media and Library Mail fell by 0.005 cents per piece. *Id.* question 7. For purchased transportation costs (Cost Segment 14), Media and Library Mail and First-Class Parcels are most affected by the proposed change. The cost for Media and Library Mail decreased by 0.013 cents per piece, while that of First-Class Parcels increased by 0.012 cents per piece. *Id.* Overall, the proposed change causes a shift in costs from competitive to market dominant products in Cost Segment 8 and Cost Segment 14. The overall volume variable cost in Cost Segment 8 for Market Dominant Products increased by \$3.626 million, while that of competitive products as a whole decreased by \$3.977 million. For Cost Segment 14, the proposed change resulted in cost increases for market dominant products of \$11.962 million, while the costs of competitive mail as a whole decreased by \$13.188 million. *Id.*

The Commission finds that the proposed methodology for calculating parcel volume by directly using actual dimensional length, width, and height data that are continuously captured in the TRACS-Highway and VSD subsystems improves the

¹⁴ See Petition, Appendix at 3, TRACS-Highway subsystem documentation, USPS-FY11-36, Appendix C, Table 1.

accuracy of TRACS distribution keys for allocating highway transportation costs to products. Therefore, the Commission approves Proposal Seven.

It is ordered:

For purposes of periodic reporting, the Commission accepts the changes in Analytical Principles proposed by the Postal Service in Proposals Six and Seven in Docket No. RM2012-7 as set forth in the body of this Order.

By the Commission.

Shoshana M. Grove
Secretary